South Dakota
Alternate Academic Content and Achievement Standards

Math Summary

KINDERGARTEN MATH ALTERNATE CONTENT STANDARDS

ALGEBRA

Goal 1: Students will use the language of algebra to explore, describe, represent, and analyze number expressions and relations that represent variable quantities.

Indicator 1:   Use procedures to transform algebraic expressions.

Note: Kindergarten students do not master standards for Indicator 1. Mastery of this indicator emerges and increases from grade 3 upward.

Indicator 2: Use a variety of algebraic concepts and methods to solve equations and inequalities.

General Education Standards	Alternate Content Standards
K.A.2.1. Compare collections of objects to determine more, less, and equal (greater than and less than).	K.A.A.2.1 Compare a collection of objects to determine more, less and equal to.

Indicator 3: Interpret and develop mathematical models.

General Education Standards	Alternate Content Standards
K.A.3.1. Use concrete objects to model the meaning of the "+" and "-" symbols.	K.A.A.3.1 Manipulate objects or picture cues to demonstrate the increase or decrease of a set of objects.

Indicator 4: Describe and apply the properties and behaviors of relations, functions and inverses.

General Education Standards	Alternate Content Standards
K.A.4.1. Identify and extend two-part repeating patterns using concrete objects.	K.A.A.4.1 Identify a pattern with objects.
K.A.4.2. Sort and classify objects according to one attribute.	K.A.A.4.2. Sort objects.

South Dakota Kindergarten Algebra Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Make collections to show more, less and equal to • Tell or show which group of objects has more or less. • Extend two part patterns. • Sort and classify objects.
Applying	• Compare a collection of objects to determine more, less and equal to • Manipulate objects or picture cues to demonstrate the increase or decrease of a set of objects • Identify a pattern with objects • Sort objects.
Developing	• Identify a collection of objects that represents more or less • Manipulate objects to demonstrate the increase or decrease of a set of objects. • Identify simple patterns in the context of play. • Sort objects according to 1 attribute.
Introducing	• Explore a collection of objects. • Manipulate objects • Play with objects containing simple patterns. • Collect desired objects.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
3	Students demonstrate knowledge and skills more than once in more than one setting without support.
2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

GEOMETRY

Goal 2: Students will use the language of geometry to discover, analyze, and communicate geometric concepts, properties, and relationships.

Indicator 1: Use deductive and inductive reasoning to recognize and apply properties of geometric figures.

General Education Standards	Alternate Content Standards
K.G.1.1. Identify basic two-dimensional (plane) figures.	K.A.G.1.1 Identify (plane) shapes (squares, circle, triangle, rectangle)

Indicator 2: Use properties of geometric figures to solve problems from a variety of perspectives.

General Education Standards	Alternate Content Standards
K.G.2.1. Describe the position of two-dimensional (plane) figures.	K.A.G.2.1. Position shapes in relation to positional words.

South Dakota Kindergarten Geometry Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Identify and describe plane figures. • Find examples of plane figures in the environment.
Applying	• Identify (plane) shapes • Position shapes in relation to positional words.
Developing	• Recognize a square, circle, rectangle and triangle • Sorts objects of the same shape.
Introducing	• Explores items in the shape of a square, circle, rectangle and triangle. • Explore/Manipulate like objects.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
3	Students demonstrate knowledge and skills more than once in more than one setting without support.
2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

MEASUREMENT

Goal 3: Students will apply systems of measurement and use appropriate measurement tools to describe and analyze the world around them.

Indicator 1: Apply measurement concepts in practical applications.

General Education Standards	Alternate Content Standards
K.M.1.1. Tell time to the hour using analog and digital clocks.	K.A.M.1.1. Recognize the concept of time.

K.M.1.2. Name the days of the week.	K.A.M.1.2. Recognize/use the names of the days of the week in association with daily activities.
K.M.1.3. Identify pennies, nickels, dimes, and quarters using money models.	K.A.M.1.3. Show understanding of the concept of money
K.M.1.4. Estimate length using non-standard units of measure.	K.A.M.1.4. Compare objects by length.
K.M.1.5. Compare and order concrete objects by length, height, and weight.	K.A.M.1.5. Compare objects by height .

South Dakota Kindergarten Measurement Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Tell time to the hour. • Recite the days of the week. • Identify a penny, nickel, and dime. • Use a non standard unit of measure to measure an object. • Compare height of an object to self.
Applying	• Recognize the concept of time. • Recognize/use the names of the days of the week in association with daily activities. • Understand the concept of money. • Compare objects by length • Compare objects by height.
Developing	• Identify night and day. • Recognize/use the names of the days of the week in association with a song or rhyme. • Plays with real money. • Plays with longer and shorter objects. • Arrange objects according to height
Introducing	• Indicate when tired. • Celebrate birthday. • Play with toy money. • Explore objects that are longer and shorter • Plays with various objects of different height.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
3	Students demonstrate knowledge and skills more than once in more than one setting without support.

2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

NUMBER SENSE

Goal 4: Students will develop and use number sense to investigate the characteristics of numbers in a variety of forms and modes of operation.

Indicator 1: Analyze the structural characteristics of the real number system and its various subsystems. Analyze the concept of value, magnitude, and relative magnitude of real numbers.

General Education Standards	Alternate Content Standards
K.N.1.1. Read, write, count, and sequence numerals to 20.	K.A.N.1.1. Identify numbers 0-9.
K.N.1.2. Use fraction models to create one half of a whole.	K.A.N.1.2 Distinguish a fractional part from a whole.

Indicator 3: Develop conjectures, predictions, or estimations to solve problems and verify or justify the results.

General Education Standards	Alternate Content Standards
K.N.3.1. Solve addition and subtraction problems up to 10 in context.	K.A.N.3.1 Solve addition/subtraction problems by counting on/counting back by one with numbers up to 9.

South Dakota Kindergarten Number Sense Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Count numbers 0-9. • Identify parts of a whole. • Solve addition/subtraction problems by counting on.
Applying	• Identify numbers 0-9. • Distinguish a fractional part from a whole. • Solve addition/subtraction problems by counting on/counting back by one with numbers up to 9.
Developing	• Identify numbers 0-5. • Separate a collection of objects into 2 equal parts. • Solve addition/subtraction problems by counting on/counting back by one up to 5.

Introducing	• Explore numbers
	• Demonstrate knowledge of a whole
	• Gives one more

Continuum of frequency, setting, and support.	
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2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

STATISTICS AND PROBABILITY

Goal 5: Students will apply statistical methods to analyze data and explore probability for making decisions and predictions.

Indicator 1: Use statistical models to gather, analyze, and display data to draw conclusions.

General Education Standards	Alternate Content Standards
K.S.1.1. Describe data represented to simple graphs (using real objects) and pictographs.	K.A.S.1.1. Identify a graph using real objects.

South Dakota Kindergarten Statistics and Probability Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Make a graph using real objects.
Applying	• Identify a graph using real objects.
Developing	• Sort objects onto a graph using 1 attribute (size, color).
Introducing	• Gather objects of one attribute

Continuum of frequency, setting, and support.	
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1	Students attempt to demonstrate knowledge and skills once in one setting with support.

1st GRADE MATH ALTERNATE CONTENT STANDARDS

ALGEBRA

Goal 1: Students will use the language of algebra to explore, describe, represent, and analyze number expressions and relations that represent variable quantities.

Indicator 1:   Use procedures to transform algebraic expressions.

Note: First grade students do not master standards for Indicator 1. Mastery of this indicator emerges and increases from grade 3 upward.

Indicator 2: Use a variety of algebraic concepts and methods to solve equations and inequalities.

General Education Standards	Alternate Content Standards
1.A.2.1. Use the concepts and language of more, less, and equal (greater than and less than) to compare numbers and sets (0 to 20).	1.A.A.2.1 Use the concepts of more, less, and equal to compare objects 0-5.
1.A.2.2. Solve open addition and subtraction sentences with one unknown (☐) using numbers equal to or less than 10.	1.A.A.2.2 Solve addition and subtraction sentences equal to or less than 5 using manipulatives.

Indicator 3: Interpret and develop mathematical models.

General Education Standards	Alternate Content Standards
1.A.3.1. Write number sentences from problem situations using + or – and = with numbers to 10.	1.A.A.3.1 Construct a simple number sentence using + or – and = with numbers to five, using a manipulative.

Indicator 4: Describe and apply the properties and behaviors of relations, functions and inverses.

General Education Standards	Alternate Content Standards
1.A.4.1. Identify and extend repeating patterns containing multiple elements using objects and pictures.	1.A.A.4.1. Identify and copy an AB pattern using a manipulative.
1.A.4.2. Determine common attributes in a given group and identify those objects that do not belong.	1.A.A.4.2. Determine one common attribute in a given group and identify the object that doesn't belong.

South Dakota 1st Grade Algebra Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Use the symbols of greater than, less than an equal to with numbers 0-5. • Solve addition and subtraction sentence equal to or less than 5. • Construct a simple number sentence using + or – and = with numbers to five. • Create an AB pattern. • Determine likeness and difference between sets.
Applying	• Use the concepts of more, less, and equal to compare objects 0-5 • Solve addition and subtraction sentences equal to or less than 5 using a manipulative • Construct a simple number sentence using + or – and = with numbers to five, using a manipulative. • Identify and copy an AB pattern using a manipulative. • Determine one common attribute in a given group and identify the object that doesn't belong.
Developing	• Identify which is more. • Use manipulative to retell a familiar song or rhyme.(5 Little Monkeys, 4 Little Monkeys etc.) • Using a model the student will repeat a given number sentence using a manipulative with assistance. • Copy an AB pattern. • Sort by one common attribute into sets of 2.
Introducing	• Indicate wanting more • Respond to song or rhyme • Using a model the student will imitate a given number sentence using a manipulative with assistance. • Respond to a modeled pattern. • Sort objects in daily play.

Continuum of frequency, setting, and support.	
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1	Students attempt to demonstrate knowledge and skills once in one setting with support.

GEOMETRY

Goal 2: Students will use the language of geometry to discover, analyze, and communicate geometric concepts, properties, and relationships.

Indicator 1: Use deductive and inductive reasoning to recognize and apply properties of geometric figures.

General Education Standards	Alternate Content Standards
1.G.1.1. Describe characteristics of plane figures.	1.A.G.1.1 Describe 1 characteristic of a plane figure.
1.G.1.2. Sort basic three-dimensional figures	1.A.G.1.2 Sort basic three-dimensional figures.

Indicator 2: Use properties of geometric figures to solve problems from a variety of perspectives.

General Education Standards	Alternate Content Standards
1.G.2.1. Describe proximity of objects in space.	1.A.G.2.1. Describe proximity (near and far) of objects in relation to self.

South Dakota 1st Grade Geometry Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Describe plane and solid figures. • Sort plane and solid figures. • Describe proximity (near and far).
Applying	• Describe 1 characteristic of a plane figure. • Sort basic three-dimensional figures. • Describe proximity (near and far) of objects in relation to self.
Developing	• Names a square, circle, rectangle and triangle. • Sort cubes and spheres • Identify proximity (near and far) of objects in relation to self.
Introducing	• Play with square, circle, rectangle and triangle. • Manipulate cubes and spheres • Demonstrates the perception of space.

Continuum of frequency, setting, and support.	
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MEASUREMENT

Goal 3: Students will apply systems of measurement and use appropriate measurement tools to describe and analyze the world around them.

Indicator 1: Apply measurement concepts in practical applications.

General Education Standards	Alternate Content Standards
1.M.1.1. Tell time to the half hour using analog and digital clocks and order a sequence of events with respect to time.	1.A.M.1.1. Tell time to the hour using a digital clock and order of morning, noon and night.
1.M.1.2. Find a date on the calendar.	1.A.M.1.2 Find a date on the calendar given a model.
1.M.1.3. Use different combinations of pennies, nickels, and dimes to represent money amounts up to 25 cents.	1.A.M.1.3 Identify coin and value of a penny, nickel a dime.
1.M.1.4. Estimate weight using non-standard units of measure.	1.A.M.1.4 Estimate weight of objects when held to determine heavier than/lighter than.
1.M.1.5. Identify appropriate measuring tools for length, weight, capacity, and temperature.	1.A.M.1.5 Identify appropriate measuring tools for length, weight and temperature.
1.M.1.6. Compare and order concrete objects by temperature and capacity.	1.A.M.1.6 Compare and classify concrete objects by temperature.

South Dakota 1st Grade Measurement Alternate Achievement Descriptors

Levels	Descriptors
Advancing	- Tell time to the hour using an analog clock. - Name days of the week. - Count a set of the same coin. - Estimate weight using non standard units. - Speak the language of measurement. - Order objects by temperature (hot to cold or cold to hot)
Applying	- Tell time to the hour using a digital clock and order of morning, noon and night. - Find a date on the calendar given a model - Identify coin and value of a penny, nickel an dime - Estimate weight of objects when held to determine heavier than/lighter than. - Identify appropriate measuring tools for length, weight and temperature. - Compare and classify concrete objects by temperature (hot and cold).

Developing	• Identify the object that tells time.
	• Identify one or more holidays.
	• Recognize penny, nickel and dime.
	• Compare the weight of two objects
	• Recognize a thermometer, ruler and scale.
	• Identify objects that are hot.
Introducing	• Approximate lunch time.
	• Participates in holidays.
	• Plays with real money.
	• Recognize that objects have weight.
	• Plays with light and heavier or longer and shorter objects.
	• Reacts to hot/cold stimuli

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NUMBER SENSE

Goal 4: Students will develop and use number sense to investigate the characteristics of numbers in a variety of forms and modes of operation.

Indicator 1: Analyze the structural characteristics of the real number system and its various subsystems. Analyze the concept of value, magnitude, and relative magnitude of real numbers.

General Education Standards	Alternate Content Standards
1.N.1.1. Read, write, count, and order numerals to 50.	1.A.N.1.1. Read, write, count, and order numerals to 20.
1.N.1.2. Use unit fraction models to create parts of a whole.	1.A.N.1.2 Use unit fraction models to create half to whole.

Indicator 2: Apply operations within the set of real numbers.

General Education Standards	Alternate Content Standards
1.N.2.1. Solve addition and Subtraction problems with numbers 0 to 20 written in horizontal and vertical formats using a variety of strategies.	1.A.N.2.1 Solve addition and subtraction problems with numbers 0-5 using a variety of strategies.

Indicator 3: Develop conjectures, predictions, or estimations to solve problems and Verify or justify the results.

General Education Standards	Alternate Content Standards
1.N.3.1. Solve addition and subtraction problems up to 20 in context.	1.A.N.3.1 Solve addition and subtraction problems up to 10 with manipulatives.

South Dakota 1st Grade Number Sense Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Sequence and write an array numbers to 20. • Identify and represent unit fractions using concrete materials. • Write addition and subtraction sentences.(0-5) • Solve horizontal and vertical addition and subtraction problems.
Applying	• Read, write, count, numerals to 20. • Use unit fraction models to create half to whole. • Solve addition and subtraction problems with numbers 0-5 using a variety of strategies. • Solve addition and subtraction problems up to 10 with manipulatives.
Developing	• Count and read numbers to 10 • Recognize part of an object. • Model one more than one • Model sums up to 5 using manipulatives.
Introducing	• Count 0-9. • Recognize whole object • Model one. • Model a sum of two.

Continuum of frequency, setting, and support.	
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1	Students attempt to demonstrate knowledge and skills once in one setting with support.

STATISTICS AND PROBABILITY

Goal 5: Students will apply statistical methods to analyze data and explore probability for making decisions and predictions.

Indicator 1: Use statistical models to gather, analyze, and display data to draw conclusions.

General Education Standards	Alternate Content Standards
1.S.1.1. Describe data in simple picture graphs with units of one and bar graphs with intervals of one.	1.A.S.1.1. Describe data represented by simple graphs.
1.S.1.2. Answer questions from organized data.	1.A.S.1.2 Answer questions from simple graphs.

Indicator 2: Apply the concepts of probability to predict events/outcomes and solve problems.

General Education Standards	Alternate Content Standards
1.S.2.1. Recognize whether the outcome of a simple event is possible or impossible.	1.A.S.2.1. Recognize the outcome of a simple event with a yes or no probability.

South Dakota 1st Grade Statistics and Probability Alternate Achievement Descriptors

Levels	Descriptors
Advancing	- Organize and display data create a simple graph. - Form questions from simple graphs. - Predict the outcomes of a simple event.
Applying	- Describe data represented to simple graphs(using real objects). - Answer questions from simple graphs. - Recognize the outcome of a simple event with a yes or no probability
Developing	- Model sums up to 5 using manipulatives. - Answer questions of "how many" using numbers 1-3. - Apply knowledge of previous event to change current outcome
Introducing	- Sort objects. - Indicate "all gone" and "more" - Respond to daily events.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
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1	Students attempt to demonstrate knowledge and skills once in one setting with support.

2nd GRADE MATH ALTERNATE CONTENT STANDARDS

ALGEBRA

Goal 1: Students will use the language of algebra to explore, describe, represent, and analyze number expressions and relations that represent variable quantities.

Indicator 1:   Use procedures to transform algebraic expressions.

Note: Second grade students do not master standards for Indicator 1. Mastery of this indicator emerges and increases from grade 3 upward.

Indicator 2: Use a variety of algebraic concepts and methods to solve equations and inequalities.

General Education Standards	Alternate Content Standards
2.A.2.1. Use concepts equal to, greater than, and less than to compare numbers (0-100).	2.A.A.2.1. Use concepts of equal to, greater than, and less than to compare numbers (0-20).
2.A.2.2. Solve open addition and subtraction sentences with one unknown (☐) using numbers equal to or less than 20.	2.A.A.2.2 Solve open addition and subtraction sentences with one unknown (☐) using numbers equal to or less than 10. (2+2= __).
2.A.2.3. Balance simple addition and subtraction equations using sums up to 20.	2.A.A.2.3. Solve simple addition and subtraction problems using sums up to 10.

Indicator 3: Interpret and develop mathematical models.

General Education Standards	Alternate Content Standards
2.A.3.1. Write and solve number sentences from word problems.	2.A.A.3.1 Solve number sentences from simple word problems using a manipulative.

Indicator 4: Describe and apply the properties and behaviors of relations, functions and inverses.

General Education Standards	Alternate Content Standards
2.A.4.1. Find and extend growing patterns using symbols, objects, and numbers.	2.A.A.4.1 Find and extend ABC patterns using objects.
2.A.4.2. Determine likenesses and differences between sets.	2.A.A.4.2. Determine likeness between sets.

South Dakota 2nd Grade Algebra Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Demonstrate the concept of equal to, greater than, and less than • Write basic number sentence in addition and subtraction of numbers to 10. • Solve simple number sentences. • Construct/Create an ABC pattern using objects. • Determine likeness and difference between sets.
Applying	• Use concepts of equal to, greater than, and less than to compare numbers (0-20) • Solve open addition and subtraction sentences with one unknown (☐) using numbers equal to or less than 10. • Solve simple addition and subtraction problems using sums up to 10. • Solve number sentences from simple word problems using a manipulative. • Find and extend ABC patterns using objects • Determine likeness between sets
Developing	• Identify concepts of greater than, and less than • Identify one more than one in groups of 2. • Solve simple addition problems using sums up to 3. • Add one to a set using a manipulative. • Copy a model of an AB pattern. • Group like sets
Introducing	• Demonstrate wanting more. • Identify one. • Identify one and one more • Copy adding one to a set using a manipulatives. • Imitate a simple pattern in the context of play. • Identify like groups

	Continuum of frequency, setting, and support.
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2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

GEOMETRY

Goal 2: Students will use the language of geometry to discover, analyze, and communicate geometric concepts, properties, and relationships.

Indicator 1: Use deductive and inductive reasoning to recognize and apply properties of geometric figures.

General Education Standards	Alternate Content Standards
2.G.1.1. Use the terms side and vertex (corners) to identify plane and solid figures.	2.A.G.1.1 Use the terms sides and corners to identify plane figures.

Indicator 2: Use properties of geometric figures to solve problems from a variety of perspectives.

General Education Standards	Alternate Content Standards
2.G.2.1. Identify geometric figures regardless of position and orientation in space.	2.A.G.2.1. Identify plane figures (square, circle, triangle, rectangle) regardless of position in space.

South Dakota 2nd Grade Geometry Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Read, write and speak the basic language of geometry. • Identify and compare plane and solid figures regardless of position in space.
Applying	• Use the terms sides and corners to identify plane figures • Identify plane figures (square, circle, triangle, rectangle) regardless of position in space.
Developing	• Sort cubes and spheres. • Identify circles and squares.
Introducing	• Plays with 3-D figures. • Match a shape regardless of position in space

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
3	Students demonstrate knowledge and skills more than once in more than one setting without support.
2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

MEASUREMENT

Goal 3: Students will apply systems of measurement and use appropriate measurement tools to describe and analyze the world around them.

Indicator 1: Apply measurement concepts in practical applications.

General Education Standards	Alternate Content Standards
2.M.1.1. Tell time to the minute using analog and digital clocks and relate time to daily events.	2.A.M.1.1. Tell time to the hour using an analog and digital and relate time to daily event.
2.M.1.2. Use the calendar to solve problems.	2.A.M.1.2 Use calendar to identify days of week
2.M.1.3. Determine the value of a collection of like and unlike coins with a value up to $1.00.	2.A.M.1.3 Recognize the coin and value of a penny, nickel, dime, quarter, and dollar.
2.M.1.4. Represent and write the value of money using the "¢" sign and in decimal form using the "$" sign.	2.A.M.1.4 Represent and write the value of penny, nickel, dime and quarter using the "¢" and a dollar using the "$" sign.
2.M.1.5. Use whole number approximations for capacity using non-standard units of measure.	2.A.M.1.5 Use whole numbers up to 20 to determine the approximations for capacity using non standard units of measure.
2.M.1.6. Solve everyday problems by measuring length to the nearest inch or foot.	2.A.M.1.6 Solve everyday problems by measuring length to the nearest foot.
2.M.1.7. Locate and name concrete objects that are about the same length, height, weight, capacity, and temperature as a given concrete object.	2.A.M.1.7 Locate and name concrete objects that are about the same length and height as a given concrete object.

South Dakota 2ⁿᵈ Grade Measurement Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Tell time to the half hour. • Read a calendar to tell month, day, and year. • Identify one penny is 1 cent, one nickel is 5 cents and one dime is 10 cents. • Write the value of a combination of pennies, nickels, dimes (76¢). • Use whole numbers to determine the approximations for capacity using non standard units of measure. • Measure length of object using standard measurement. • Measure objects that are about the same length and height as a given concrete object.

Applying	• Tell time to the hour using analog and digital clocks and relate time to daily event.
	• Use calendar to identify days of week.
	• Recognize the coin and value of a penny, nickel, dime, quarter, and dollar.
	• Represent and write the value of penny, nickel, dime and quarter using the "¢" and a dollar using the "$" sign.
	• Use whole numbers up to 20 to determine the approximations for capacity using non standard units of measure
	• Solve everyday problems by measuring length to the nearest foot.
	• Locate and name concrete objects that are about the same length and height as a given concrete object.
Developing	• Name the object that tells the time.
	• Locate the calendar in the classroom.
	• Students are able to represent and write the value of penny, nickel, dime and quarter using the "¢" and a dollar using the "$" sign.
	• Recognize the value of a penny, nickel, dime as money.
	• Arrange objects according to height.
	• Arrange objects according to height.
	• Compare self to a given object to determine taller or shorter.
Introducing	• Indicate verbally or non-verbally the object that tells time.
	• Recognizes a routine in their day.
	• Manipulate coins.
	• Manipulate coins.
	• Put objects in a container.
	• Take a movement to a given object.
	• Demonstrate so big with assistance (therapy).

Continuum of frequency, setting, and support.	
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2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

NUMBER SENSE

Goal 4: Students will develop and use number sense to investigate the characteristics of numbers in a variety of forms and modes of operation.

Indicator 1:   Analyze the structural characteristics of the real number system and its various subsystems. Analyze the concept of value, magnitude, and relative magnitude of real numbers.

General Education Standards	Alternate Content Standards
2. N.1.1. Read, write, count, and sequence numerals to 100.	2.A.N.1.1. Read, write, count and order to 25.
2. N.1.2. Identify and represent fractions as parts of a group.	2.A.N.1.2 Identify and represent one half, one quarter as parts of a whole.

Indicator 2: Apply operations within the set of real numbers.

General Education Standards	Alternate Content Standards
2. N.2.1. Solve two-digit addition and subtraction problems written in horizontal and vertical formats using a variety of strategies.	2.A.N.2.1 Solve addition and subtraction problem to 18.

Indicator 3: Develop conjectures, predictions, or estimations to solve problems and verify or justify the results.

General Education Standards	Alternate Content Standards
2. N.3.1. Solve addition and subtraction problems up to 100 in context.	2.A.N.3.1 Solve addition and subtraction problems up to 10.

South Dakota 2nd Grade Number Sense Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Sequence and add numbers up to 50. • Identify and write fractions as part of a whole. (1/2 and 1/4). • Add and subtract one- and two-digit numbers. • Solve and write addition and subtraction problems in horizontal and vertical format up to 10.
Applying	• Read, write, count and order to 25. • Identify and represent one half, one quarter as parts of a whole. • Solve addition and subtraction problem to 18(fact families to 18) using a variety of strategies • Solve addition and subtraction problems up to 10.

Developing	- Count and read 20. - Recognize a whole object. - Model one more than 2 - Model sums up to 5 using one to one correspondence.
Introducing	- Count to 18. - Create a whole object by using 2 parts - Model more than one. - Manipulate more than one.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
3	Students demonstrate knowledge and skills more than once in more than one setting without support.
2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

STATISTICS AND PROBABILITY

Goal 5: Students will apply statistical methods to analyze data and explore probability for making decisions and predictions.

Indicator 1: Use statistical models to gather, analyze, and display data to draw conclusions.

General Education Standards	Alternate Content Standards
2. S.1.1. Use interviews, surveys, and observations to gather data.	2.A.S.1.1 Use interviews to gather data.
2. S.1.2. Represent data sets in more than one way.	2.A.S.1.2 Use data in interview to complete graph and tables.
2. S.1.3. Answer questions about and generate explanations of data given in tables and graphs.	2.A.S.1.3 Answer simple questions about data given in graphs and tables.

Indicator 2: Apply the concepts of probability to predict events/outcomes and solve problems.

General Education Standards	Alternate Content Standards
2. S.2.1. List possible outcomes of a simple event and make predictions about which outcome is more or less likely to occur.	2.A.S.2.1. List possible outcomes of a simple event.

South Dakota 2nd Grade Statistics and Probability Alternate Achievement Descriptors

Levels	Descriptors
Advancing	- Gather and represent data for a graph. - Interpret data to solve a graph. - Differentiate data in a given graph. - Predict possible outcomes of a simple event.
Applying	Applying students perform more than once in more than one setting without support the following, as specified by each student's Individualized Educational Plan (IEP) - Use interviews to gather data. - Use data in interview to complete graph and tables. - Answer simple questions about data given in graphs and tables - List possible outcomes of a simple event
Developing	- Gather data by asking "why" or "what." - Use real objects to create a graph with assistance. - Answer simple "which" or "what" questions. - Use pictorial cues to determine right or wrong.
Introducing	- Sort and compare objects. - Manipulate objects in daily play. - Can indicate self when asked. - Indicate yes or no answer.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
3	Students demonstrate knowledge and skills more than once in more than one setting without support.
2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

3rd GRADE MATH ALTERNATE CONTENT STANDARDS

ALGEBRA

Goal 1: Students will use the language of algebra to explore, describe, represent, and analyze number expressions and relations that represent variable quantities.

Indicator 1:   Use procedures to transform algebraic expressions.

General Education Standards	Alternate Content Standards
3. A.1.1. Explain the relationship between repeated addition and multiplication.	3.A.A.1.1. Recognize, create, and extend pattern.
3. A.1.2. Identify special properties of 0 and 1 with respect to arithmetic operations (addition, subtraction, multiplication).	3.A.A.1.2. Use the numbers 0 and 1 in addition, subtraction, and multiplication.

Indicator 2: Use a variety of algebraic concepts and methods to solve equations and inequalities.

General Education Standards	Alternate Content Standards
3. A.2.1. Select appropriate relational symbols ($<$, $>$, $=$) to compare numbers.	3.A.A.2.1. Recognize relational symbols ($<$, $>$, $=$).
3. A.2.2. Solve problems involving addition and subtraction of whole numbers.	3.A.A.2.2. Solve problems involving addition and subtraction of whole numbers.

Indicator 3: Interpret and develop mathematical models.

General Education Standards	Alternate Content Standards
3. A.3.1. Use the relationship between multiplication and division to compute and check results.	3.A.A.3.1 Develop relationships between inverse operations using manipulatives.

Indicator 4: Describe and apply the properties and behaviors of relations, functions and inverses.

General Education Standards	Alternate Content Standards
3.A.4.1. Extend linear patterns.	3.A.A.4.1 Extend linear patterns.
3.A.4.2. Use number patterns and relationships to learn basic facts.	3.A.A.4.2 Use number patterns and relationships to learn basic facts.

South Dakota 3rd Grade Algebra Alternate Achievement Descriptors

Levels	Descriptors
Advancing	- Apply patterns to solve problems. - Explain the rules of 0 and 1 in addition, subtraction, and multiplication. - Apply relational symbols ($<$, $>$, $=$) to compare numbers. - Create and solve problems involving addition and subtraction. - Develop and explain relationships between inverse operations using manipulatives. - Create linear patterns. - Create number patterns using basic facts.
Applying	- Recognize, create, and extend pattern. - Use the numbers 0 and 1 in addition, subtraction, and multiplication. - Recognize relational symbols ($<$, $>$, $=$). - Solve problems involving addition and subtraction of whole numbers. - Develop relationships between inverse operations using manipulatives. - Extend linear patterns. - Use number patterns and relationships to learn basic facts.
Developing	- Recognize and create a pattern. - Use the numbers 0 and 1 in addition and subtraction. - Use concepts of equal to, greater than, and less than to compare numbers. - Recognize plus or minus symbols. - Manipulate pictures and objects to create sets and make comparisons between sets. - Tell what is missing from a pattern. - Identify and create a pattern using familiar objects.
Introducing	- Identify a pattern. - Use the numbers 0 and 1 in addition. - Use manipulatives to demonstrate the concepts of equal to, greater than, and less than. - Use manipulatives to demonstrate that addition is adding more and subtraction is taking away. - Match objects to create sets. - Copy a pattern. - Reproduce a pattern.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
3	Students demonstrate knowledge and skills more than once in more than one setting without support.
2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

GEOMETRY

Goal 2: Students will use the language of geometry to discover, analyze, and communicate geometric concepts, properties, and relationships.

Indicator 1: Use deductive and inductive reasoning to recognize and apply properties of geometric figures.

General Education Standards	Alternate Content Standards
3.G.1.1. Recognize and compare the following plane and solid geometric figures: square, rectangle, triangle, cube, sphere, and cylinder.	3.A.G.1.1. Recognize and sort geometric shapes: square, circle, triangle, and rectangle.
3.G.1.2. Identify points, lines, line segments, and rays.	3.A.G.1.2. Identify points, lines, line segments, and rays.

Indicator 2: Use properties of geometric figures to solve problems from a variety of perspectives.

General Education Standards	Alternate Content Standards
3.G.2.1. Demonstrate relationships between figures using similarity and congruence.	3.A.G.2.1. Identify similarities and differences between geometric figures.

South Dakota 3rd Grade Geometry Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Compare geometric shapes: square, circle, triangle. • Create lines, line segments, and rays. • Explain similarities and differences between geometric figures.
Applying	• Recognize and sort geometric shapes: square, circle, triangle, and rectangle. • Identify points, lines, line segments, and rays. • Identify similarities and differences between geometric figures.
Developing	• Match rectangle, circle, and square of different size and color. • Create a line segment by connecting two points. • Match and sort similar figures.
Introducing	• Match simple two-dimensional shapes. • Identify points. • Recognize similar figures.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.

3	Students demonstrate knowledge and skills more than once in more than one setting without support.
2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

MEASUREMENT

Goal 3: Students will apply systems of measurement and use appropriate measurement tools to describe and analyze the world around them.

Indicator 1: Apply measurement concepts in practical applications.

General Education Standards	Alternate Content Standards
3.M.1.1. Read and tell time on an analog clock before the hour and after the hour within five-minute intervals.	3.A.M.1.1. Read and tell time on an analog clock to the nearest hour.
3.M.1.2. Count, compare, and solve problems using a collection of coins and bills.	3.A.M.1.2. Identify and name the value of a dollar, quarter, dime, nickel, and penny.
3.M.1.3. Identify U.S. Customary units of length (feet), weight (pounds), capacity (gallons).	3.A.M.1.3. Identify U.S. Customary tools for measuring length (feet), weight (pounds), and capacity (gallons).
3.M.1.4. Select appropriate units to measure length (inch, foot, mile, yard); weight (ounces, pounds, tons); and capacity (cups, pints, quarts, gallons). 3.M.1.5. Measure length to the nearest 1/2 inch.	3.A.M.1.4. and 3.A.M.1.5. Identify the appropriate measurement tools in the standard system.

South Dakota 3rd Grade Measurement Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Relate common events with specific times on the clock. • Compare the values of quarter, dime, nickel, and penny. • Classify tools for measuring length (feet), weight (pounds), and capacity (gallons). • Select and use the appropriate measurement tools in the standard system.
Applying	• Read and tell time on an analog clock to the nearest hour. • Identify and name the value of a quarter, dime, nickel, and penny. • Identify U.S. Customary tools for measuring length (feet), weight (pounds), and capacity (gallons). • Identify the appropriate measurement tools in the standard system.

Developing	• Recognize hour and minute hands.
	• Identify quarter, dime, nickel, and penny.
	• Compare familiar objects by size, weight, and capacity.
	• Measure common objects.
Introducing	• Recognize the difference between morning, afternoon, and night.
	• Sort quarter, dime, nickel, and penny.
	• Sort familiar objects by size and weight.
	• Recognize measurement tools.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
3	Students demonstrate knowledge and skills more than once in more than one setting without support.
2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

NUMBER SENSE

Goal 4: Students will develop and use number sense to investigate the characteristics of numbers in a variety of forms and modes of operation.

Indicator 1:   Analyze the structural characteristics of the real number system and its various subsystems. Analyze the concept of value, magnitude, and relative magnitude of real numbers.

General Education Standards	Alternate Content Standards
3.N.1.1. Order and compare whole numbers less than 10,000 using appropriate words and symbols.	3.A.N.1.1. Read, write, count, and order whole numbers to 100.
3.N.1.2. Find multiples of whole numbers 2, 5, and 10.	3.A.N.1.2. Count by ones, fives, and tens.
3.N.1.3. Name and write fractions from visual representations.	3.A.N.1.3. Identify and represent one half and one quarter as parts of a whole.

Indicator 2: Apply operations within the set of real numbers.

General Education Standards	Alternate Content Standards
3.N.2.1. Add and subtract whole numbers up to three digits and multiply two digits by one digit.	3.A.N.2.1. Add and subtract whole numbers to two digits.

Indicator 3: Develop conjectures, predictions, or estimations to solve problems and verify or justify the results.

General Education Standards	Alternate Content Standards
3.N.3.1. Round two-digit whole numbers to the nearest ten and three-digit whole numbers to the nearest hundred.	3.A.N.3.1. Round two-digit whole numbers to the nearest tens.

South Dakota 3rd Grade Number Sense Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Compare numerals to 100. • Create patterns using skip counting to solve problems. • Name and write fractions from visual representation. • Add and subtract two digit whole numbers with regrouping. • Compare estimates to actual answers.
Applying	• Read, write, count, and order numerals to 100. • Counts by ones, fives, and tens. • Identify and represent one half and one quarter as parts of a whole. • Add and subtract whole numbers to two digits. • Round two-digit whole numbers to the nearest tens.
Developing	• Read and count numerals to 100. • Counts by ones and fives. • Recognize wholes, halves and quarters. • Subtract one digit numbers. • Identify place value to tens.
Introducing	• Counts to 50. • Counts by ones. • Manipulate up to four parts of an object to assemble a whole. • Add one digit numbers. • Recognize the difference between an estimate and an exact amount.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.

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2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

STATISTICS AND PROBABILITY

Goal 5: Students will apply statistical methods to analyze data and explore probability for making decisions and predictions.

Indicator 1: Use statistical models to gather, analyze, and display data to draw conclusions.

General Education Standards	Alternate Content Standards
3.S.1.1. Ask and answer questions from data represented in bar graphs, pictographs, and tally charts.	3.A.S.1.1. Answer simple questions from data represented in a graph.
3.S.1.2. Gather data and use information to complete a scaled and labeled graph.	3.A.S.1.2. Identify data on a graph, table, or chart.

Indicator 2: Apply the concepts of probability to predict events/outcomes and solve problems.

General Education Standards	Alternate Content Standards
3.S.2.1. Describe events as certain or impossible.	3.A.S.2.1. Identify events that are impossible by using concrete materials.

South Dakota 3rd Grade Statistics and Probability Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Create a graph from gathered data. • Analyze data on a graph, table, or chart. • Create a list of events that are certain or impossible.
Applying	• Answer simple questions from data represented in a graph. • Identify data on a graph, table, or chart. • Identify events that are impossible or possible by using concrete materials.
Developing	• Gather data on familiar objects. • Label parts of a graph, table, or chart. • List possible causes of a simple event.
Introducing	• Collect, sort, and organize objects by different characteristics. • Identify parts of a graph, table, or chart. • List possible outcomes of a simple event.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
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2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

4th GRADE MATH ALTERNATE CONTENT STANDARDS

ALGEBRA

Goal 1: Students will use the language of algebra to explore, describe, represent, and analyze number expressions and relations that represent variable quantities.

Indicator 1:   Use procedures to transform algebraic expressions.

General Education Standards	Alternate Content Standards
4.A.1.1. Simplify whole number expressions involving addition, subtraction, multiplication, and division.	4.A.A.1.1. Solve number sentences using whole numbers.
4.A.1.2. Recognize and use the commutative property of addition and multiplication.	4.A.A.1.2. Use a model to identify commutative property of addition and multiplication.
4.A.1.3. Relate the concepts of addition, subtraction, multiplication, and division to one another.	4.A.A.1.3. Show relationship between addition and subtraction.

Indicator 2: Use a variety of algebraic concepts and methods to solve equations and inequalities.

General Education Standards	Alternate Content Standards
4.A.2.1. Select appropriate relational symbols (<, >, =) to make number sentences true.	4.A.A.2.1. Use inequalities/equalities to compare numbers.
4.A.2.2. Simplify a two-step equation using whole numbers.	4.A.A.2.2. Determine the value of variables in simple equations.

Indicator 3: Interpret and develop mathematical models.

General Education Standards	Alternate Content Standards
4.A.3.1. Write and solve number sentences that represent one-step word problems using whole numbers.	4.A.A.3.1. Create number sentences that represent one-step word problems using whole numbers.

Indicator 4: Describe and apply the properties and behaviors of relations, functions and inverses.

General Education Standards	Alternate Content Standards
4.A.4.1. Solve problems involving pattern identification and completion of patterns.	4.A.A.4.1. Identify number patterns to solve simple problems.

South Dakota 4th Grade Algebra Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Create and solve number sentences using whole numbers. • Explain the commutative property of addition and multiplication. • Compare the relationship between addition and subtraction. • Select appropriate symbols ($<$, $>$, $=$) to compare numbers. • Create and solve a simple equation using variables. • Solve word problems by converting to algebraic statements. • Solve simple problems by creating number patterns.
Applying	• Solve number sentences using whole numbers. • Use a model to identify commutative property of addition and multiplication. • Show relationship between addition and subtraction. • Use inequalities/equalities to compare numbers. • Determine the value of variables in simple equations. • Create number sentences that represent one-step word problems using whole numbers. • Identify number patterns to solve simple problems.
Developing	• Solves addition and subtraction problems using a number line. • Solves addition problems. • Understand the terms and corresponding symbols for addition (+) and subtraction (-). • Understand terms and corresponding symbols for equal to, less than, and greater than. • Solve a simple equation. • Given a number sentence, solve a one-step word problem. • Identify and complete a number pattern.
Introducing	• Represent and differentiate simple addition and subtraction number sentences using pictures, objects, and/or manipulatives. • Understands that addition is adding to a group. • Match/manipulate pictures and objects to create sets and make comparisons between sets. • Compare sets of objects to determine more, less, or equal. • Use concrete materials to model and solve simple equations. • Solve simple number sentences using the basic operations of addition, subtraction, and multiplication with a model. • Identify a number pattern.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
3	Students demonstrate knowledge and skills more than once in more than one setting without support.

2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

GEOMETRY

Goal 2: Students will use the language of geometry to discover, analyze, and communicate geometric concepts, properties, and relationships.

Indicator 1: Use deductive and inductive reasoning to recognize and apply properties of geometric figures.

General Education Standards	Alternate Content Standards
4.G.1.1. Identify the following plane and solid figures: pentagon, hexagon, octagon, pyramid, rectangular prism, and cone.	4.A.G.1.1. Identify the following plane figures: pentagon, hexagon, and octagon.
4.G.1.2. Identify parallel, perpendicular, and intersecting lines.	4.A.G.1.2. Identify parallel and intersecting lines.

Indicator 2: Use properties of geometric figures to solve problems from a variety of perspectives.

General Education Standards	Alternate Content Standards
4.G.2.1. Compare geometric figures using size, shape, orientation, congruence, and similarity.	4.A.G.2.1. and 4.A.G.2.2. Sort and compare geometric figures using size, shape, and orientation.
4.G.2.2. Identify a slide (translation) of a given figure.	

South Dakota 4th Grade Geometry Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Create plane figures: pentagon, hexagon, and octagon. • Draw parallel, perpendicular, and intersecting lines. • Compare geometric figures using the terms congruent and similar.
Applying	• Identify the following plane figures: pentagon, hexagon, and octagon. • Identify parallel and intersecting lines. • Sort and compare geometric figures using size, shape, and orientation.
Developing	• Recognize and name circle, rectangle, and triangle. • Describe and draw a line. • Recognizes that a shape remains the same shape when it changes position.
Introducing	• Match shapes with corresponding symbols and shapes in the environment. • Identify a line. • Identify geometric figures.

	Continuum of frequency, setting, and support.
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
3	Students demonstrate knowledge and skills more than once in more than one setting without support.
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1	Students attempt to demonstrate knowledge and skills once in one setting with support.

MEASUREMENT

Goal 3: Students will apply systems of measurement and use appropriate measurement tools to describe and analyze the world around them.

Indicator 1: Apply measurement concepts in practical applications.

General Education Standards	Alternate Content Standards
4.M.1.1. Identify equivalent periods of time and solve problems.	4.A.M.1.1. Identify equivalent periods of time.
4.M.1.2. Solve problems involving money including unit conversion.	4.A.M.1.2. Count and compare collections of coins.
4.M.1.3. Use scales of length, temperature, capacity, and weight.	4.A.M.1.3. Use the U.S. Customary tools of length (feet), weight (pounds), and capacity (gallons).
4.M.1.4. Measure length to the nearest quarter-inch.	4.A.M.1.4. Measure length to the nearest inch.

South Dakota 4th Grade Measurement Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Identify equivalent periods of time and solve problems. • Count and compare collections of coins to solve problems. • Decide which U.S. Customary tools of length (feet), weight (pounds), and capacity (gallons) to use. • Measure length to the nearest 1/2 inch.
Applying	• Identify equivalent periods of time. • Count and compare collections of coins. • Use the U.S. Customary tools of length (feet), weight (pounds), and capacity (gallons). • Measure length to the nearest inch.

Developing	• Identifies parts of the day (e.g. morning, afternoon, evening), days of the week, and months of the year. • Identifies, sorts, and names coins by their value. • Describe the similarities between two pictures, objects, and/or manipulatives using measurement concepts. • Identify the appropriate measurement tools in the standard system.
Introducing	• Identifies today/tomorrow/yesterday on a calendar. • Identifies coins. • Compare familiar objects by size, weight, or other attributes involving measurement. • Measure length using nonstandard units.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
3	Students demonstrate knowledge and skills more than once in more than one setting without support.
2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

NUMBER SENSE

Goal 4: Students will develop and use number sense to investigate the characteristics of numbers in a variety of forms and modes of operation.

Indicator 1: Analyze the structural characteristics of the real number system and its various subsystems. Analyze the concept of value, magnitude, and relative magnitude of real numbers.

General Education Standards	Alternate Content Standards
4.N.1.1. Read, write, order, and compare numbers from .01 to 1,000,000.	4.A.N.1.1. Read, write, order, and compare whole numbers from 1 to 100.
4.N.1.2. Find multiples of whole numbers through 12.	4.A.N.1.2. Count by twos, threes, fives, and tens.
4.N.1.3. Use a number line to compare numerical value of fractions or mixed numbers (fourths, halves and thirds).	4.A.N.1.3. Compare common fractions on a number line.
4.N.1.4. Interpret negative integers in temperature.	4.A.N.1.4. Recognize above and below zero temperatures on a thermometer.

Indicator 2: Apply operations within the set of real numbers.

General Education Standards	Alternate Content Standards
4.N.2.1. Find the products of two-digit factors and quotient of two natural numbers using a one-digit divisor.	4.A.N.2.1. Apply the whole number system in multiplication.
4.N.2.2. Add and subtract decimals with the same number of decimal places.	4.A.N.2.2. Recognize decimals.

Indicator 3: Develop conjectures, predictions, or estimations to solve problems and verify or justify the results.

General Education Standards	Alternate Content Standards
4.N.3.1. Estimate sums and differences in whole numbers and money to determine if a given answer is reasonable.	4.A.N.3.1. Use estimation in problem solving with a number line.

South Dakota 4th Grade Number Sense Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Calculate and solve problems involving addition and subtraction with numbers from 1 to 100. • Find multiples of whole numbers through 10. • Identify improper fractions, proper fractions, and mixed numbers. • Recall multiplication facts through 9s. • Compare money amounts written with decimals. • Use estimates in whole numbers and money to determine if a given answer is reasonable.
Applying	• Read, write, order, and compare whole numbers from 1 to 100. • Count by twos, threes, fives, and tens. • Compare common fractions on a number line. • Recognize above and below zero temperatures on a thermometer. • Apply the whole number system in multiplication. • Write money as decimals with dollars and cents. • Use estimation in problem solving with a number line.
Developing *(Continued)*	• Read, write, and count numbers to 100. • Counts by ones, fives, and tens. • Identify and compare parts of a whole (quarters, thirds, halves) and determine relative size of each (1/2, 1/3, 1/4) using manipulatives. • Recognize and read above zero temperatures on a thermometer.

	• Use repeated addition to demonstrate the multiplication process.
	• Recognize and use decimals.
	• Compare estimations with exact answers.
Introducing	• Counts to 100.
	• Counts by ones and tens.
	• Recognize wholes and halves.
	• Recognizes that a thermometer measures temperature.
	• Uses concrete materials to combine equal sets of groups to show repeated addition.
	• Recognize decimals.
	• Round two digit numbers.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
3	Students demonstrate knowledge and skills more than once in more than one setting without support.
2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

STATISTICS AND PROBABILITY

Goal 5: Students will apply statistical methods to analyze data and explore probability for making decisions and predictions.

Indicator 1: Use statistical models to gather, analyze, and display data to draw conclusions.

General Education Standards	Alternate Content Standards
4.S.1.1. Interpret data from graphical representations and draw conclusions.	4.A.S.1.1. Represent simple data in different formats.
4.S.1.2. Given a small ordered data set of whole number data points (odd number of points), students will identify the median, mode, and range.	4.A.S.1.2. Identify the median when given a small order data set of whole number data points (odd number of points).

Indicator 2: Apply the concepts of probability to predict events/outcomes and solve problems.

General Education Standards	Alternate Content Standards
4.S.2.1. Determine the probability of simple events limited to equally likely and not equally likely outcomes.	4.A.S.2.1. Classify events as likely or unlikely.

South Dakota 4th Grade Statistics and Probability Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Interpret data from graphical representations. • Identify and use the median to solve simple problems. • Predict the outcome of events as likely or unlikely.
Applying	• Represent simple data in different formats. • Identify the median when given a small order data set of whole number data points (odd number of points). • Classify events as likely or unlikely.
Developing	• Names the category that has the most, least, or the same on a graph. • Describe or draw conclusions about data using concrete objects and/or manipulatives. • Identify events that are impossible or possible by using concrete materials.
Introducing	• Collect, match, and/or sort objects with similar characteristics. • Describe characteristics of an object, picture, or a manipulative. • List possible outcomes of a simple event.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
3	Students demonstrate knowledge and skills more than once in more than one setting without support.
2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

5th GRADE MATH ALTERNATE CONTENT STANDARDS

ALGEBRA

Goal 1: Students will use the language of algebra to explore, describe, represent, and analyze number expressions and relations that represent variable quantities.

Indicator 1:   Use procedures to transform algebraic expressions.

General Education Standards	Alternate Content Standards
5.A.1.1. Use a variable to write an addition expression.	5.A.A.1.1. Use a variable to write an addition expression.
5.A.1.2. Recognize and use the associative property of addition and multiplication.	5.A.A.1.2. Recognize the associative property of addition and multiplication.

Indicator 2: Use a variety of algebraic concepts and methods to solve equations and inequalities.

General Education Standards	Alternate Content Standards
5.A.2.1. Write one-step first degree equations using the set of whole numbers and find a solution.	5.A.A.2.1. Write addition equations using the set of whole numbers and find a solution.

Indicator 3: Interpret and develop mathematical models.

General Education Standards	Alternate Content Standards
5.A.3.1.Write and solve number sentences that represent two-step word problems using whole numbers.	5.A.A.3.1. Identify information needed to solve two-step word problems using whole numbers.
5.A.3.2. Identify information and apply it to a given formula.	5.A.A.3.2 OMIT

Indicator 4: Describe and apply the properties and behaviors of relations, functions and inverses.

General Education Standards	Alternate Content Standards
5.A.4.1. Solve problems using patterns involving more than one operation.	5.A.A.4.1 Solve problems using patterns with whole numbers.

South Dakota 5th Grade Algebra Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Use a variable to write addition and subtraction expressions. • Recognize and use the associative property of addition and multiplication. • Write addition and subtraction equations using the set of whole numbers and find a solution. • Solve and identify information needed to solve two-step word problems using whole numbers. • Solve problems using patterns involving more than one operation.
Applying	• Use a variable to write an addition expression. • Recognize use the associative property of addition and multiplication. • Write addition equations using the set of whole numbers and find a solution. • Identify information needed to solve two-step word problems using whole numbers. • Solve problems using patterns with whole numbers.
Developing	• Write an addition expression. • Demonstrate the associative property of addition by grouping items. • Identify the missing variable in an equation. • Identify information needed to solve one-step word problems using whole numbers. • Identify and continue and pattern with pictorial representations.
Introducing	• Identify an addition expression. • Identify groups that are equal. • Using a set of pictures or objects students will identify an equation. • Identify the numbers used in the word problem. • Demonstrate a pattern.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
3	Students demonstrate knowledge and skills more than once in more than one setting without support.
2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

GEOMETRY

Goal 2: Students will use the language of geometry to discover, analyze, and communicate geometric concepts, properties, and relationships.

Indicator 1: Use deductive and inductive reasoning to recognize and apply properties of geometric figures.

General Education Standards	Alternate Content Standards
5.G.1.1. Describe and identify isosceles and equilateral triangles, pyramids, rectangular prisms, and cones.	5.A.G.1.1 Identify the characteristics of triangles, pyramids, rectangular prisms, and cones.
5.G.1.2. Identify acute, obtuse, and right angles.	5.A.G.1.2. Identify and describe acute, obtuse, and right angles.

Indicator 2: Use properties of geometric figures to solve problems from a variety of perspectives.

General Education Standards	Alternate Content Standards
5.G.2.1. Determine lines of symmetry in rectangles, squares, and triangles.	5.A.G.2.1 Determine lines of symmetry in rectangles, squares, and triangles.
5.G.2.2. Identify a turn or flip (rotation or reflection) of a given figure.	5.A.G.2.2 Identify a turn or flip (rotation or reflection) of a given figure.
5.G.2.3. Use two-dimensional coordinate grids to find locations and represent points and simple figures.	5.A.G.2.3 Use two-dimensional coordinate grids to find locations.

South Dakota 5th Grade Geometry Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Describe and identify triangles, pyramids, rectangular prisms, and cones. • Draw, identify and describe acute, obtuse, and right angles. • Determine and draw lines of symmetry in rectangles, squares, and triangles. • Identify a turn, slide, or flip (rotation, translation, or reflection) of a given figure. • Use two-dimensional coordinate grids to find locations and simple figures.
Applying	• Identify the characteristics of triangles, pyramids, rectangular prisms, and cones. • Identify acute, obtuse, and right angles. • Determine lines of symmetry in rectangles, squares, and triangles. • Identify a turn or flip (rotation or reflection) of a given figure. • Use two-dimensional coordinate grids to find locations.

Developing	• Identify triangles, pyramids, rectangular prisms, and cones.
	• Identify acute, obtuse, and right angles.
	• Determine if the line is symmetric.
	• Demonstrate a turn or flip using a concrete shape.
	• Identify a given location simple coordinate map.
Introducing	• Identify triangles, rectangular prisms, and cones.
	• Identify angles.
	• Compare two parts of a whole.
	• Slide an object from one position to another.
	• Find a location when given direction words such as up, down, or over.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
3	Students demonstrate knowledge and skills more than once in more than one setting without support.
2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

MEASUREMENT

Goal 3: Students will apply systems of measurement and use appropriate measurement tools to describe and analyze the world around them.

Indicator 1: Apply measurement concepts in practical applications.

General Education Standards	Alternate Content Standards
5.M.1.1. Determine elapsed time within an a.m. or p.m. period on the quarter-hour.	5.A.M.1.1. Determine elapsed time within an a.m. or p.m. period on the half-hour.
5.M.1.2. Solve problems involving money including making change.	5.A.M.1.2 Solve problems involving money including making change.
5.M.1.3. Use and convert U.S. Customary units of length (inches, feet, yard), and weight (ounces, pounds).	5.A.M.1.3 Use and/or convert U.S. Customary units of length (inches, feet, yard), and weight (ounces, pounds).
5.M.1.4. Use appropriate tools to measure length, weight, temperature, and area in problem solving.	5.A.M.1.4 Use appropriate tools to measure length, weight, and temperature in problem solving.

South Dakota 5th Grade Measurement Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Determine elapsed time within an a.m. or p.m. period on the quarter-hour. • Solve problems involving money including making change and counting it back. • Use and convert U.S. Customary units of length (inches, feet, yard), and weight (ounces, pounds). • Use appropriate tools to measure length, weight, area, and temperature in problem solving.
Applying	• Determine elapsed time within an a.m. or p.m. period on the half-hour. • Solve problems involving money including making change. • Use and/or convert U.S. Customary units of measurement. • Use appropriate tools to measure length, weight, and temperature in problem solving.
Developing	• Determine elapsed time within an a.m. or p.m. period on the hour. • Count money. • Use U.S. Customary units of length (inches, feet, yard), and weight (ounces, pounds). • Use appropriate tools to measure length, weight, and temperature.
Introducing	• Identify and give the date for today, tomorrow, and yesterday. • Sort and group collections of coins. • Identify longer, shorter, heavier, or lighter. • Choose the appropriate tool needed for length, weight, or temperature.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
3	Students demonstrate knowledge and skills more than once in more than one setting without support.
2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

NUMBER SENSE

Goal 4: Students will develop and use number sense to investigate the characteristics of numbers in a variety of forms and modes of operation.

Indicator 1:   Analyze the structural characteristics of the real number system and its various subsystems. Analyze the concept of value, magnitude, and relative magnitude of real numbers.

General Education Standards	Alternate Content Standards
5.N.1.1. Read, write, order, and compare numbers from .001 to 1,000,000,000.	5.A.N.1.1. Read, write, order, and compare whole numbers up to 1000.
5.N.1.2. Find prime, composite, and factors of whole numbers from 1 to 50.	5.A.N.1.2 Distinguish if numbers are prime and identify factors for numbers .
5.N.1.3. Identify alternative representations of fractions and decimals involving tenths, fourths, halves, and hundredths.	5.A.N.1.3 OMIT
5.N.1.4. Locate negative integers on a number line.	5.A.N.1.4 Locate negative integers on a number line.
5.N.1.5. Determine the squares of numbers 1 – 12.	5.A.N.1.5 OMIT

Indicator 2: Apply operations within the set of real numbers.

General Education Standards	Alternate Content Standards
5.N.2.1. Find the quotient of whole numbers using two-digit divisors.	5.A.N.2.1 When given a divisor, students will divide a given set of objects into groups.
5.N.2.2. Determine equivalent fractions including simplification (lowest terms of fractions).	5.A.N.2.2 Identify equivalent fractions including simplification.
5.N.2.3. Multiply and divide decimals by natural numbers (1 – 9).	5.A.N.2.3 OMIT

Indicator 3: Develop conjectures, predictions, or estimations in the process of problem solving and verify or justify the results.

General Education Standards	Alternate Content Standards
5.N.3.1. Use different estimation strategies to solve problems involving whole numbers, decimals, and fractions to the nearest whole number.	5.A.N.3.1 Use different estimation strategies to solve problems using whole numbers.

South Dakota 5th Grade Number Sense Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Read, write, order, and compare whole numbers from .01 to 1000. • Identify factors of whole numbers up to 20. • Label negative integers on a number line. • Find the quotient of whole numbers using single-digit divisors. • Identify equivalent fractions including simplification. • Use different estimation strategies to solve problems using whole numbers.
Applying	• Read, write, order, and compare whole numbers up to 1000. • Distinguish if numbers are prime and identify factors for numbers. • Locate negative integers on a number line. • When given a divisor students will divide a given set of objects into groups. • Identify equivalent fractions including simplification. • Use different estimation strategies to solve problems using whole numbers.
Developing	• Order and compare numbers up to 1000. • Identify factors of whole numbers up to 9. • Recognize negative numbers on a thermometer. • Divide a set of given objects into groups. • Use a number line to identify equivalent fractions. • Estimate whole numbers by rounding to the nearest tens.
Introducing	• Order whole numbers. • Group items by a given number. • Identify numbers on a number line. • Divide a set of given objects into equal groups. • Identify a fraction of a whole. • Identify the concept of few or many.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
3	Students demonstrate knowledge and skills more than once in more than one setting without support.
2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

STATISTICS AND PROBABILITY

Goal 5: Students will apply statistical methods to analyze data and explore probability for making decisions and predictions.

Indicator 1: Use statistical models to gather, analyze, and display data to draw conclusions.

General Education Standards	Alternate Content Standards
5.S.1.1. Gather, graph, and interpret data.	5.A.S.1.1. Gather, graph, and/or interpret data.
5.S.1.2. Calculate and explain mean for a whole number data set.	5.A.S.1.2 OMIT

Indicator 2: Apply the concepts of probability to predict events/outcomes and solve problems.

General Education Standards	Alternate Content Standards
5.S.2.1. Classify probability of simple events as certain, likely, unlikely, or impossible.	5.A.S.2.1. Classify probability of simple events as certain, likely, unlikely, or impossible.
5.S.2.2. Use models to display possible outcomes.	5.A.S.2.2 OMIT

South Dakota 5th Grade Statistics and Probability Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Gather, graph, and draw conclusions from data. • Find the probability of a simple event doing an activity.
Applying	• Gather, graph, and/or interpret data. • Classify probability of simple events as certain, likely, unlikely, or impossible.
Developing	• Answer simple questions about the data. • Indicate if an event is possible or impossible.
Introducing	• Indicate greater than or less when referring to items on a graph. • Determine if an event is possible.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
3	Students demonstrate knowledge and skills more than once in more than one setting without support.
2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

6th GRADE MATH ALTERNATE CONTENT STANDARDS

ALGEBRA

Goal 1: Students will use the language of algebra to explore, describe, represent, and analyze number expressions and relations that represent variable quantities.

Indicator 1:   Use procedures to transform algebraic expressions.

General Education Standards	Alternate Content Standards
6.A.1.1. Use order of operations, excluding nested parentheses and exponents, to simplify whole number expressions.	6.A.A.1.1. OMIT
6.A.1.2. Write algebraic expressions involving addition or multiplication using whole numbers.	6.A.A.1.2. Write simple algebraic expressions involving addition or multiplication using whole numbers.

Indicator 2: Use a variety of algebraic concepts and methods to solve equations and inequalities.

General Education Standards	Alternate Content Standards
6.A.2.1. Write and solve one-step 1st degree equations, with one variable, involving inverse operations using the set of whole numbers..	6.A.A.2.1. Write and solve addition equations using the set of whole numbers.

Indicator 3: Interpret and develop mathematical models.

General Education Standards	Alternate Content Standards
6.A.3.1. Identify and graph ordered pairs in Quadrant I on a coordinate plane.	6.A.A.3.1 Graph ordered pairs in Quadrant 1 on a coordinate plane.
6.A.3.2. Solve one-step problems involving ratios and rates.	6.A.A.3.2 Identify and write simple ratios & rates.

Indicator 4: Describe and apply the properties and behaviors of relations, functions and inverses.

General Education Standards	Alternate Content Standards
6.A.4.1. Use concrete materials, graphs, and algebraic statements to represent problem situations.	6.A.A.4.1 Use concrete materials and graphs to represent problem situations.

South Dakota 6th Grade Algebra Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Write simple algebraic expressions involving addition or multiplication using whole numbers. • Write and solve equations involving the inverse operations of addition and subtraction using the set of whole numbers. • Identify and graph ordered pairs in quadrant 1 on a coordinate plane. • Solve one-step problems involving ratios and rates. • Use concrete materials, graphs, and algebraic statements to represent problem situations.
Applying	• Write simple algebraic expressions involving addition or multiplication using whole number. • Write and solve addition equations using the set of whole numbers. • Graph ordered pairs in Quadrant 1 on a coordinate plane. • Identify and write simple ratios & rates. • Use concrete materials and graphs to represent problem situations.
Developing	• Illustrate simple algebraic expressions involving addition using whole numbers. • Identify the missing variable in an equation. • Identify ordered pairs in Quadrant 1 on a coordinate plane. • Identify simple ratios. • Use concrete materials or select a graph that represents the problem situation.
Introducing	• Copy an algebraic expressions involving addition using whole numbers. • Using a set of pictures or objects students will identify an equation. • With guidance students will trace the path of ordered pairs. • Count the items used to make a ratio. • Select the correct illustration or set of concrete materials that represents the problem situation.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
3	Students demonstrate knowledge and skills more than once in more than one setting without support.
2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

GEOMETRY

Goal 2: Students will use the language of geometry to discover, analyze, and communicate geometric concepts, properties, and relationships.

Indicator 1: Use deductive and inductive reasoning to recognize and apply properties of geometric figures.

General Education Standards	Alternate Content Standards
6.G.1.1. Identify and describe the characteristics of triangles and quadrilaterals.	6.A.G.1.1. Identify and describe the characteristics of triangles and quadrilaterals.
6.G.1.2. Identify and describe angles.	6.A.G.1.2. Identify and describe angles.

Indicator 2: Use properties of geometric figures to solve problems from a variety of perspectives.

General Education Standards	Alternate Content Standards
6.G.2.1. Use basic shapes to demonstrate geometric concepts.	6.A.G.2.1 Use basic figures to demonstrate lines of symmetry, reflection, perpendicular lines, and parallel lines.

South Dakota 6th Grade Geometry Alternate Achievement Descriptors

Levels	Descriptors
Advancing	- Draw, identify and describe the characteristics of triangles and quadrilaterals. - Identify and describe angles. - Use basic figures to demonstrate congruency, lines of symmetry, reflection, perpendicular lines, and parallel lines.
Applying	- Identify and describe the characteristics of triangles and quadrilaterals. - Identify and describe angles. - Use basic figures to demonstrate lines of symmetry, reflection, perpendicular lines, and parallel lines.
Developing	- Differentiate between different types of triangles and quadrilaterals. - Differentiate between different types of angles. - Identify lines of symmetry, reflection, perpendicular lines, and parallel lines in figure.
Introducing	- Match similar triangles and quadrilaterals. - Match similar angles. - Trace lines of symmetry, perpendicular lines, and parallel lines in figure.

	Continuum of frequency, setting, and support.
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
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2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

MEASUREMENT

Goal 3: Students will apply systems of measurement and use appropriate measurement tools to describe and analyze the world around them.

Indicator 1: Apply measurement concepts in practical applications.

General Education Standards	Alternate Content Standards
6.M.1.1. Select, use, and convert appropriate unit of measurement for a situation.	6.A.M.1.1. Select, use, and/or convert appropriate unit of measurement within a measurement system.
6.M.1.2. Find the perimeter and area of squares and rectangles (whole number measurements).	6.A.M.1.2 Find the perimeter and/or the area of squares and rectangles.

South Dakota 6th Grade Measurement Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Use and convert appropriate unit of measurement within a measurement system. • Identify the perimeter and the area of squares and rectangles.
Applying	• Select, use, and/or convert appropriate unit of measurement within a measurement system. • Find the perimeter and/or the area of squares and rectangles.
Developing	• Select and use the appropriate unit of measurement within a measurement system. • Identify the perimeter.
Introducing	• Select the appropriate unit of measurement within a measurement system. • Trace the perimeter.

	Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.	
3	Students demonstrate knowledge and skills more than once in more than one setting without support.	
2	Students demonstrate knowledge and skills once in one setting with minimal support.	
1	Students attempt to demonstrate knowledge and skills once in one setting with support.	

NUMBER SENSE

Goal 4: Students will develop and use number sense to investigate the characteristics of numbers in a variety of forms and modes of operation.

Indicator 1:   Analyze the structural characteristics of the real number system and its various subsystems. Analyze the concept of value, magnitude, and relative magnitude of real numbers.

General Education Standards	Alternate Content Standards
6.N.1.1. Represent fractions in equivalent forms and convert between fractions, decimals, and percents using halves, fourths, tenths, and hundredths.	6.A.N.1.1. Order and compare decimals and whole numbers.
6.N.1.2. Find factors and multiples of whole numbers.	6.A.N.1.2 Find factors and multiples of whole numbers, and identify prime numbers.

Indicator 2: Apply operations within the set of real numbers.

General Education Standards	Alternate Content Standards
6.N.2.1. Add, subtract, multiply, and divide decimals.	6.A.N.2.1 Add and subtract decimals.

Indicator 3: Develop conjectures, predictions, or estimations in the process of problem solving and verify or justify the results.

General Education Standards	Alternate Content Standards
6.N.3.1. Use various strategies to solve one- and two-step problems involving positive decimals.	6.A.N.3.1 Use various strategies to solve one- and two-step problems using addition or subtraction of whole numbers.

South Dakota 6th Grade Number Sense Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Order and compare fractions, decimals and whole numbers. • Find factors up to 20 and multiples of whole numbers. • Add, multiply, and subtract decimals. • Use various strategies to solve one-step decimal problems.
Applying	• Order and compare whole number and decimals • Find factors and multiples of whole numbers, and identify prime numbers. • Add and subtract decimals. • Use various strategies to solve one- and two-step problems using addition and subtraction of whole numbers.
Developing	• Order and compare decimals and whole numbers using a number line. • Identify the missing factor using a multiplication chart and count by 2's, 3's, 5's, and/or 10's to find multiples. • Add and subtract whole numbers. • Identify what operation or operations will be used to solve the problem.
Introducing	• Identify greater than or less to order whole numbers. • Group items by a given number. • Indicate the concept of adding to or taking away. • Identify the numbers used to solve the problem.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
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2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

STATISTICS AND PROBABILITY

Goal 5: Students will apply statistical methods to analyze data and explore probability for making decisions and predictions.

Indicator 1: Use statistical models to gather, analyze, and display data to draw conclusions.

General Education Standards	Alternate Content Standards
6.S.1.1. Find the mean, mode, and range of an ordered set of positive data.	6.A.S.1.1. OMIT

6.S.1.2. Display data using bar and line graphs and draw conclusions from data displayed in a graph.	6.A.S.1.2 Interpret the data using bar and line graphs and answer questions from data displayed in a graph.

Indicator 2: Apply the concepts of probability to predict events/outcomes and solve problems.

General Education Standards	Alternate Content Standards
6.S.2.1. Find the probability of a simple event.	6.A.S.2.1. Explain the probability of a simple event using pictorial representations.

South Dakota 6th Grade Statistics and Probability Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Display the data using bar and line graphs and draw conclusions from data displayed in a graph. • Find the probability of a simple event through an activity.
Applying	• Interpret data using bar and line graphs and answer questions from data displayed in a graph. • Explain the probability of a simple event using manipulatives.
Developing	• Use graphs to answer simple questions from the data displayed in a graph. • Identify if an event is likely, certain, unlikely, or impossible.
Introducing	• Indicate greater than or less when referring to items on a graph. • Indicate if an event is possible or impossible.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
3	Students demonstrate knowledge and skills more than once in more than one setting without support.
2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

7th GRADE MATH ALTERNATE CONTENT STANDARDS

ALGEBRA

Goal 1: Students will use the language of algebra to explore, describe, represent, and analyze number expressions and relations that represent variable quantities.

Indicator 1:   Use procedures to transform algebraic expressions.

General Education Standards	Alternate Content Standards
7.A.1.1. Write and evaluate algebraic expressions using the set of whole numbers.	7.A.A.1.1 Write and simplify addition and subtraction algebraic expressions.
7.A.1.2. Identify associative, commutative, distributive, and identity properties involving algebraic expressions.	7.A.A.1.2. Identify and use associative, commutative, and identity properties involving whole numbers.

Indicator 2: Use a variety of algebraic concepts and methods to solve equations and inequalities.

General Education Standards	Alternate Content Standards
7.A.2.1. Write and solve one-step 1st degree equations, with one variable, using the set of integers and inequalities, with one variable, using the set of whole numbers.	7.A.A.2.1. Write and solve one-step 1st degree equations with one variable, using whole numbers.

Indicator 3: Interpret and develop mathematical models.

General Education Standards	Alternate Content Standards
7.A.3.1. Identify and graph ordered pairs on a coordinate plane and inequalities on a number line.	7.A.A.3.1. Identify and graph ordered pairs on a coordinate plane and inequalities on a number line.
7.A.3.2. Model and solve multi-step problems involving rates.	7.A.A.3.2. Model and solve multi-step problems involving rates.

Indicator 4: Describe and apply the properties and behaviors of relations, functions and inverses.

General Education Standards	Alternate Content Standards
7.A.4.1. Recognize one-step patterns using tables, graphs, and models and create one-step algebraic expressions representing the pattern.	7.A.A.4.1. Use patterns to solve problems.

South Dakota 7th Grade Algebra Alternate Achievement Descriptors

Levels	Descriptors
Advancing	- Create and evaluate algebraic expressions involving addition, subtraction, and multiplication of whole numbers. - Identify and use associative, commutative, distributive, and identity properties involving whole numbers - Write and solve one-step 1st degree inequalities with one variable, using whole numbers. - Construct a graph from a table. - Create and solve multi-step problems involving rates. - Create one-step algebraic expressions representing a pattern.
Applying	- Write and simplify addition and subtraction algebraic expressions. - Identify and use associative, commutative, and identity properties involving whole numbers. - Write and solve one-step 1st degree equations with one variable, using whole numbers. - Identify and graph ordered pairs on a coordinate plane and inequalities on a number line. - Model and solve multi-step problems involving rates. - Use patterns to solve problems (graphs, table, and equations)
Developing	- When given the values for variables the student will simplify addition and subtraction algebraic expressions. - Use objects and manipulatives to demonstrate the associative and commutative and identity properties. - Use symbols and manipulatives to solve equations. - Graph a number line. - Model and solve rates with a one to one correlation. - Use manipulatives to create patterns.
Introducing	- Use symbolic representation of unknown or variable quantities. - Identify situations in which the order of events makes a difference and situations in which the order does not make a difference (commutative and non-commutative tasks) - Use manipulatives to complete a task or solve a problem. - When given a direction and a demonstration using a simple positional concept, student will understand that direction by giving the appropriate response. - Follow order of operations. - Given a pattern students will repeat the pattern.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
3	Students demonstrate knowledge and skills more than once in more than one setting without support.

2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

GEOMETRY

Goal 2: Students will use the language of geometry to discover, analyze, and communicate geometric concepts, properties, and relationships.

Indicator 1: Use deductive and inductive reasoning to recognize and apply properties of geometric figures.

General Education Standards	Alternate Content Standards
7.G.1.1. Identify, describe, and classify polygons having up to 10 sides.	7.A.G.1.1. Identify and describe polygons having up to 10 sides.
7.G.1.2. Identify and describe elements of geometric figures.	7.A.G.1.2. Identify and describe geometric figures.

Indicator 2: Use properties of geometric figures to solve problems from a variety of perspectives.

General Education Standards	Alternate Content Standards
7.G.2.1. Demonstrate ways that shapes can be transformed.	7.A.G.2.1 Demonstrate ways that shapes can be transformed.

South Dakota 7th Grade Geometry Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Construct polygons with up to 10 sides. • Differentiate between geometric figures • Compare ways shapes can be transformed.
Applying	• Identify and describe polygons having up to 10 sides. • Identify and describe geometric figures. • Demonstrate ways that shapes can be transformed.
Developing	• Classify polygons having up to 10 sides. • Draw points, lines, and lines segments. • Use a variety of materials to move objects left, right, up, and down.
Introducing	• Classify three basic shapes (circle, triangle, square). • Identify points, lines, and lines segments. • Select identical shapes.

	Continuum of frequency, setting, and support.
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
3	Students demonstrate knowledge and skills more than once in more than one setting without support.
2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

MEASUREMENT

Goal 3: Students will apply systems of measurement and use appropriate measurement tools to describe and analyze the world around them.

Indicator 1: Apply measurement concepts in practical applications.

General Education Standards	Alternate Content Standards
7.M.1.1. Select, use, and convert appropriate unit of measurement for a situation including capacity and angle measurement. with rational number.	7.A.M.1.1. Select, use and convert appropriate units of standard and metric measurement.
7.M.1.2. Given the formulas, find the circumference, perimeter, and area of circles, parallelograms, triangles, and trapezoids (whole number measurement).	7.A.M.1.2 Given the formula students will find the perimeter and area of four sided figures (quadrilaterals).

South Dakota 7th Grade Measurement Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Compare units of standard and metric measurement. • Given the formulas students will find the perimeter and area of three and four sided figures.
Applying	• Use and convert appropriate units of standard and metric measurement. • Given the formula students will find the perimeter and area of four sided figures (quadrilaterals).
Developing	• Measure and determine which measurement unit is appropriate. • Given the lengths and widths of a four-sided figure (quadrilateral), students will add the four sides to determine the perimeter.
Introducing	• When given two pictures, objects, and/or manipulatives, students are able, to indicate which is less/more, longer/shorter. • Trace a four-sided shape (quadrilateral.)

	Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.	
3	Students demonstrate knowledge and skills more than once in more than one setting without support.	
2	Students demonstrate knowledge and skills once in one setting with minimal support.	
1	Students attempt to demonstrate knowledge and skills once in one setting with support.	

NUMBER SENSE

Goal 4: Students will develop and use number sense to investigate the characteristics of numbers in a variety of forms and modes of operation.

Indicator 1:   Analyze the structural characteristics of the real number system and its various subsystems. Analyze the concept of value, magnitude, and relative magnitude of real numbers.

General Education Standards	Alternate Content Standards
7.N.1.1. Represent numbers in a variety of forms by describing, ordering, and comparing integers, decimals, percents, and fractions.	7.A.N.1.1. Order integers, decimals, and percents.
7.N.1.2. Find and use common multiples and factors of whole numbers.	7.A.N.1.2 Find and use multiples and factors of whole numbers.

Indicator 2: Apply operations within the set of real numbers.

General Education Standards	Alternate Content Standards
7.N.2.1. Add, subtract, multiply, and divide integers and positive fractions.	7.A.N.2.1 Add and subtract integers and positive common fractions.

Indicator 3: Develop conjectures, predictions, or estimations in the process of problem solving and verify or justify the results.

General Education Standards	Alternate Content Standards
7.N.3.1. Use various strategies to solve one- and two-step problems involving positive fractions	7.A.N.3.1 Use various strategies to solve one step problems involving positive fractions.

South Dakota 7th Grade Number Sense Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Read, write, order, and compare integers, decimals and percents. • Identify the common multiples and factors of whole numbers. • Add, subtract and multiply integers and common fractions. • Use various strategies to write one-step problems involving positive fractions.
Applying	• Order and compare integers, decimals, and percents. • Find and use multiples and factors of whole numbers. • Add and subtract integers and positive common fractions. • Use various strategies to solve one step problems involving positive fractions.
Developing	• Order and compare numbers. • Student will skip count by 2, 5, and10. • Add and subtract numbers. • Identify how many parts of a whole they have and express that in the form of a fraction.
Introducing	• Order numbers. • Group numbers by 2, 5 and 10. • Given a set of manipulatives, students will add manipulatives to and take manipulatives from the set. • Using manipulatives, students will separate into parts.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
3	Students demonstrate knowledge and skills more than once in more than one setting without support.
2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

STATISTICS AND PROBABILITY

Goal 5: Students will apply statistical methods to analyze data and explore probability for making decisions and predictions.

Indicator 1: Use statistical models to gather, analyze, and display data to draw conclusions.

General Education Standards	Alternate Content Standards
7.S.1.1. Find the mean, median, mode, and range of a set of data.	7.A.S.1.1. Gather and organize data to find mode and range.

7.S.1.2. Display data, using frequency tables, line plots, stem-and-leaf plots and make predictions from data displayed in a graph.	7.A.S.1.2 Display data on a graph, table, or chart and make predictions from the data.

Indicator 2: Apply the concepts of probability to predict events/outcomes and solve problems.

General Education Standards	Alternate Content Standards
7.S.2.1. Given a sample space, find the probability of a specific outcome.	7.A.S.2.1. Predict a simple specific outcome.

South Dakota 7th Grade Statistics and Probability Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Gather and organize data to analyze mode and range. • Make predictions from data displayed in a graph. • Find the probability of a specific outcome.
Applying	• Gather and organize data to find mode and range. • Display data on a graph, table, or chart and make predictions from the data. • Predict a simple specific outcome.
Developing	• Gather and organize data. • Display data on a graph, table, or chart. • Recognize whether the outcome of a simple event is possible or impossible.
Introducing	• Participate in activities to gather and organize data. • Gather information to answer questions of interest. • Given a repeated action, student will predict the outcome of given action.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
3	Students demonstrate knowledge and skills more than once in more than one setting without support.
2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

8th GRADE MATH ALTERNATE CONTENT STANDARDS

ALGEBRA

Goal 1: Students will use the language of algebra to explore, describe, represent, and analyze number expressions and relations that represent variable quantities.

Indicator 1:   Use procedures to transform algebraic expressions.

General Education Standards	Alternate Content Standards
8.A.1.1. Use properties to expand, combine, and simplify 1st degree algebraic expressions with the set of integers...	8.A.A.1.1 Identify and use the identity, associative, and communicative properties to simplify 1st degree algebraic expressions whole numbers.

Indicator 2: Use a variety of algebraic concepts and methods to solve equations and inequalities.

General Education Standards	Alternate Content Standards
8.A.2.1. Write and solve two-step 1st degree equations, with one variable, and one-step inequalities, with one variable, using the set of integers.	8.A.A.2.1. Write and solve one-step 1st degree equations and inequalities with one variable, using whole numbers.

Indicator 3: Interpret and develop mathematical models.

General Education Standards	Alternate Content Standards
8.A.3.1. Describe and determine linear relationships.	8.A.A.3.1. Identify linear relationships through graphs.

Indicator 4: Describe and apply the properties and behaviors of relations, functions and inverses.

General Education Standards	Alternate Content Standards
8.A.4.1. Create rules to explain the relationship between numbers when a change in the first variable affects the second variable.	8.A.A.4.1. Demonstrate how the change in one variable affects/changes another variable in an equation.
8.A.4.2. Describe and represent relations using tables, graphs, and rules.	8.A.A.4.2 Describe and represent relations using tables and graphs.

South Dakota 8th Grade Algebra Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Use the identity, associative, commutative, and distributive properties to simplify 1st degree algebraic expressions using whole numbers. • Write and solve one-step 1st degree equations with one variable using the set of integers. • Describe and determine linear relationships through graphs. • Explain the relationship between numbers when a change in the first variable affects the second variable. • Create tables and graphs to describe and represent relations.
Applying	• Identify and use the identity, associative, and communicative properties to simplify 1st degree algebraic expressions whole numbers. • Write and solve one-step 1st degree equations and inequalities with one variable, using whole numbers. • Identify linear relationships through graphs. • Demonstrate how the change in one variable affects/changes another variable in an equation. • Describe and represent relations using tables and graphs.
Developing	• Use objects and manipulatives to demonstrate the associative and commutative and identity properties. • Use symbols and manipulatives to solve equations and inequalities. • Extend a pattern using simple addition and subtraction. • Match/manipulate pictures and objects to create sets and make comparisons between sets. • When given data students will record onto table/graph.
Introducing	• Identify situations in which the order of events makes a difference and situations in which the order does not make a difference (commutative and non-commutative tasks). • Use manipulatives to complete a task or pattern. • Complete a pattern. • Acknowledge a change in patterns/sets. • Organize objects into groups.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
3	Students demonstrate knowledge and skills more than once in more than one setting without support.
2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

GEOMETRY

Goal 2: Students will use the language of geometry to discover, analyze, and communicate geometric concepts, properties, and relationships.

Indicator 1: Use deductive and inductive reasoning to recognize and apply properties of geometric figures.

General Education Standards	Alternate Content Standards
8.G.1.1. Describe and classify prisms, pyramids, cylinders, and cones.	8.A.G.1.1. Identify & describe prisms, pyramids, cylinders, and cones.
8.G.1.2 Students, when given any two sides of an illustrated right triangle, are able to use the Pythagorean Theorem to find the third side.	8.A.G.1.2. Omit

Indicator 2: Use properties of geometric figures to solve problems from a variety of perspectives.

General Education Standards	Alternate Content Standards
8.G.2.1. Write and solve proportions that express the relationships between corresponding parts of similar quadrilaterals and triangles.	8.A.G.2.1 Identify proportions that express the relationships between corresponding parts of similar quadrilaterals and triangles.

South Dakota 8th Grade Geometry Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Classify prisms, pyramids, cylinders and cones. • Solve proportions that express the relationships between corresponding parts of similar quadrilaterals and triangles
Applying	• Identify and describe prisms, pyramids, cylinders, and cones. • Identify proportions that express the relationships between corresponding parts of similar quadrilaterals and triangles.
Developing	• Classify prisms, pyramids, cylinders and cones. • Given quadrilaterals and triangles, the student will sort according to similar proportions.
Introducing	• Match prisms, pyramids, cylinders, and cones. • Given two quadrilaterals, the student will identify which object is larger/smaller.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.

3	Students demonstrate knowledge and skills more than once in more than one setting without support.
2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

MEASUREMENT

Goal 3: Students will apply systems of measurement and use appropriate measurement tools to describe and analyze the world around them.

Indicator 1: Apply measurement concepts in practical applications.

General Education Standards	Alternate Content Standards
8.M.1.1. Apply proportional reasoning to solve measurement problems with rational number measurements.	8.A.M.1.1. Solve proportional measurement problems with rational number measurements.
8.M.1.2. Find area, volume, and surface area with whole number measurements.	8.A.M.1.2 When given formulas students will find circumference/perimeter and area of circles and triangles.

South Dakota 8th Grade Measurement Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Differentiate proportional measurement problems with rational numbers. • Find perimeter/circumference and area of circles and triangles.
Applying	• Solve proportional measurement problems with rational number measurements. • When given formulas students will find circumference/perimeter and area of circles and triangles.
Developing	• Solve time and calendar problems. • Compare and order concrete circles and triangles.
Introducing	• Participate in measurement activities with other students. • Participate in measurement activities with other students in order to identify measurement symbols.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
3	Students demonstrate knowledge and skills more than once in more than one setting without support.

2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

NUMBER SENSE

Goal 4: Students will develop and use number sense to investigate the characteristics of numbers in a variety of forms and modes of operation.

Indicator 1: Analyze the structural characteristics of the real number system and its various subsystems. Analyze the concept of value, magnitude, and relative magnitude of real numbers.

General Education Standards	Alternate Content Standards
8.N.1.1. Represent numbers in a variety of forms and identify the subsets of rational numbers.	8.A.N.1.1. Represent numbers in a variety of forms and identify the subsets of rational numbers.

Indicator 2: Apply operations within the set of real numbers.

General Education Standards	Alternate Content Standards
8.N.2.1. Read, write, and compute within any subset of rational numbers.	8.A.N.2.1 Read, write, and compute within any subset of positive rational numbers.

Indicator 3: Develop conjectures, predictions, or estimations in the process of problem solving and verify or justify the results.

General Education Standards	Alternate Content Standards
8.N.3.1. Use various strategies to solve multi-step problems involving rational numbers.	8.A.N.3.1 Use various strategies to solve multi-step problems involving positive rational numbers.

South Dakota 8th Grade Number Sense Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Represent numbers in a variety of forms and identify the subsets of rational numbers. • Read, write, and compute within any subset of rational numbers. • Use various strategies to solve multi-step problems involving rational numbers.

Applying	• Represent numbers in a variety of forms and identify the subsets of rational numbers.
	• Read, write, and compute within any subset of positive rational numbers.
	• Use various strategies to solve multi-step problems involving positive rational numbers.
Developing	• Order and compare numbers.
	• Read and write any subset of positive rational numbers.
	• Use various strategies to solve one-step problems involving positive rational numbers.
Introducing	• Count numbers.
	• Use manipulatives and separate them into parts.
	• Solve addition and subtraction problems up to five.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
3	Students demonstrate knowledge and skills more than once in more than one setting without support.
2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

STATISTICS AND PROBABILITY

Goal 5: Students will apply statistical methods to analyze data and explore probability for making decisions and predictions.

Indicator 1: Use statistical models to gather, analyze, and display data to draw conclusions.

General Education Standards	Alternate Content Standards
8.S.1.1. Find the mean, median, mode, and range of a data set from a stem-and-leaf plot and a line plot.	8.A.S.1.1. Order numbers to find a median, mode, and range of an odd set of data.
8.S.1.2. Use a variety of visual representations to display data to make comparisons.	8.A.S.1.2 Use a variety of visual representations to display data to make comparisons.

Indicator 2: Apply the concepts of probability to predict events/outcomes and solve problems.

General Education Standards	Alternate Content Standards
8.S.2.1. Find the sample space and compute probability for two simultaneous independent events.	8.E.S.2.1. Find and compute probability.

South Dakota 8th Grade Statistics and Probability Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Find the median of a set of data. • Create a variety of visual representations to display data to make comparisons and predictions. • Compare probability for independent events.
Applying	• Order numbers to find a median, mode, and range of an odd set of data. • Use a variety of visual representations to display data to make comparisons. • Find and compute probability.
Developing	• Order a set of numbers to 20. • Use a variety of visual representations to display data. • List possible outcomes of a simple event and make predictions about which outcome is more or less likely to occur.
Introducing	• Count to 10. • Using manipulative, students will identify which group has the most/least in a set of collected data. • Predict the outcome of a given event.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
3	Students demonstrate knowledge and skills more than once in more than one setting without support.
2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

HIGH SCHOOL MATH ALTERNATE CONTENT STANDARDS

ALGEBRA

Goal 1: Students will use the language of algebra to explore, describe, represent, and analyze number expressions and relations that represent variable quantities.

Indicator 1: Use procedures to transform algebraic expressions.

General Education Standards	Alternate Content Standards
9-12.A.1.1. Write equivalent forms of algebraic expressions using properties of the set of real numbers.	9-12.A.A.1.1 Uses properties to simplify first degree algebraic expressions using identities, commutative, associative, properties using fractions, and decimals.

Indicator 2: Use a variety of algebraic concepts and methods to solve equations and inequalities.

General Education Standards	Alternate Content Standards
9-12.A.2.1. Use algebraic properties to transform multi-step, single variable, and first-degree equations.	9-12.A.A.2.1 Solves two step, first degree equations (properties, variables, symbols).
9-12.A.2.2. Use algebraic properties to transform multi-step, single variable, and first-degree inequalities and represent solutions using a number line.	9-12.A.A.2.2 Translates verbal/written expression into an algebraic inequality.

Indicator 3: Interpret and develop mathematical models.

General Education Standards	Alternate Content Standards
9-12.A.3.1. Create linear models to represent problem situations.	9-12.A.A.3.1 Interpret and develop relationships between problems with constant rate of change.
9-12.A.3.2. (Comprehension) Distinguish between linear and nonlinear models.	9-12.A.A.3.2/4.1 Complete the next three numbers in a given pattern (graphs, tables, equations)

Indicator 4: Describe and apply the properties and behaviors of relations, functions and inverses.

General Education Standards	Alternate Content Standards
9-12.A.4.1. Use graphs, tables, and equations to represent linear functions.	9-12.A.A.4.1 *Combined with* 9-12.A.A.3.2

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South Dakota HS Algebra Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Uses properties of real numbers; including the distributive property. • Solves multi-step, single variables and first-degree equations. • Solves inequalities (properties, variables, symbols) with representations • Create linear models using independent and dependent variables. • Explains the rule of the pattern.
Applying	• Uses properties to simplify first degree algebraic expressions using identities, commutative, associative, properties using fractions, and decimals. • Solves two step, first degree equations (properties, variables, symbols) • Translates verbal/written expression into an algebraic inequality. • Interpret and develop relationships between problems with constant rate of change. • Complete the next three numbers in a given pattern (graphs, tables, equations)
Developing	• Uses properties to simplify first degree algebraic expressions using identities, commutative, associative, properties using whole numbers. • Solves one-step, first degree equations (properties, variables, symbols) • Understands inequalities (properties, variables, symbols) with representations (The student puts the correct symbol in the problem.) • Graph or table to illustrate constant rates of change. • Distinguish if a pattern exists(graphs, tables, equations)
Introducing	• Recognize equivalent expressions. • Recognizes a first degree equation. • Recognizes greater than or less than on a number line. • Recognizes various rates of change. • Explores various patterns.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
3	Students demonstrate knowledge and skills more than once in more than one setting without support.
2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

GEOMETRY

Goal 2: Students will use the language of geometry to discover, analyze, and communicate geometric concepts, properties, and relationships.

Indicator 1: Use deductive and inductive reasoning to recognize and apply properties of geometric figures.

General Education Standards	Alternate Content Standards
9-12.G.1.1. Apply the properties of triangles and quadrilaterals to find unknown parts.	9-12.A.G.1.1. Identify similarities and differences of angles/lengths of sides of triangles and quadrilaterals (3 and 4 sided figures).
9-12.G.1.2. Identify and apply relationships among triangles.	9-12.A.G.1.2. OMIT

Indicator 2: Use properties of geometric figures to solve problems from a variety of perspectives.

General Education Standards	Alternate Content Standards
9-12.G.2.1. Recognize the relationship between a three-dimensional figure and its two-dimensional representation.	9-12.A.G.2.1 Given a three dimensional figure, the student will determine what two dimensional shapes exists.
9-12.G.2.2. Reflect across vertical or horizontal lines, and translate two dimensional figures.	9-12.A.G.2.2 Traces a mirror image vertically or horizontally.
9-12.G.2.3. Use proportions to solve problems	9-12.A.G.2.3 Write and solve proportions through visual groupings.

South Dakota HS Geometry Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Apply the properties of triangles and quadrilaterals to find unknown parts • Given a two dimensional representation the student will create a three dimensional figure. • Translates two dimensional figures. • Will write and solve proportions from word problems.
Applying	• Identify similarities and differences of angles/lengths of sides of triangles and quadrilaterals (3 and 4 sided figures). • Traces a mirror image vertically or horizontally. • Will write and solve equivalent proportions through visual groupings.

Developing	• Define the characteristics of triangles and quadrilaterals.
	• Will identify and explain the differences between a two dimensional and three dimensional shapes.
	• Identifies a vertical and horizontal reflection
	• Solve proportions.
Introducing	• Classifies types of triangles and quadrilaterals
	• Will identify the name of the 3-dimensional shape when given visual representation (cone, prism, and cylinder).
	• Identifies a properly reflected image.
	• Demonstrates how to reduce fractions.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
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2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

MEASUREMENT

Goal 3: Students will apply systems of measurement and use appropriate measurement tools to describe and analyze the world around them.

Indicator 1: Apply measurement concepts in practical applications.

General Education Standards	Alternate Content Standards
9-12.M.1.1. Choose appropriate unit label, scale, and precision.	9-12.A.M.1.1. Applies appropriate labels and scales for length, weight, and volume in English units.
9-12.M.1.2. Use suitable units when describing rate of change.	9-12.A.M.1.2 Use suitable units when describing rate of change.
9-12.M.1.3. Use formulas to find perimeter, circumference, and area to solve problems involving common geometric figures.	9-12.A.M.1.3 When given formulas, students will solve circumference, area and perimeter from a given visual geometric figure.

South Dakota HS Measurement Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Applies the metric system of measurement.
	• Graph suitable units when describing rate of change.
	• Choose from formulas provided, students will solve circumference, area and perimeter from a given visual geometric figure.

Applying	• Applies appropriate labels and scales for length, weight, and volume in English units. • Use suitable units when describing rate of change. • When given formulas, students will solve circumference, area and perimeter from a given visual geometric figure.
Developing	• Converts measures of lengths, or weight, or volumes to different units. • Student will extract appropriate information from a real-life situation. • Identifies the correct formulas for different geometric figures.
Introducing	• Defines the different units of measurement and recognizes the appropriate tools for measurement. • Student will recognize a rate of change in a given situation. • Calculates the perimeter of quadrilaterals.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
3	Students demonstrate knowledge and skills more than once in more than one setting without support.
2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

NUMBER SENSE

Goal 4: Students will develop and use number sense to investigate the characteristics of numbers in a variety of forms and modes of operation.

Indicator 1:   Analyze the structural characteristics of the real number system and its various subsystems. Analyze the concept of value, magnitude, and relative magnitude of real numbers.

General Education Standards	Alternate Content Standards
9-12.N.1.1. Identify multiple representations of a real number.	9-12.A.N.1.1. Identify equivalent representations of numbers using fractions, decimals, diagrams and percents.
9-12.N.1.2. Apply the concept of place value, magnitude, and relative magnitude of real numbers.	9-12.A.N.1.2 Apply the concept of place value, magnitude, and relative magnitude using percents, fractions, diagrams and decimals.

Indicator 2: Apply operations within the set of real numbers.

General Education Standards	Alternate Content Standards
9-12.N.2.1. Add, subtract, multiply, and divide real numbers including integral exponents.	9-12.A.N.2.1 Add and subtract real numbers with or without a calculator.

Indicator 3: Develop conjectures, predictions, or estimations in the process of problem solving and verify or justify the results.

General Education Standards	Alternate Content Standards
9-12.N.3.1. Use estimation strategies in problem situations to predict results and to check the reasonableness of results.	9-12.A.N.3.1 Uses estimation strategies in problem situations to predict results.
9-12.N.3.2. Select alternative computational strategies and explain the chosen strategy.	9-12.A.N.3.2 Omit

South Dakota HS Number Sense Alternate Achievement Descriptors

Levels	Descriptors
Advancing	- Identify equivalent representations of numbers using fractions, decimals, diagrams, percents and numbers with exponents. - Apply the concept of place value, magnitude, and relative magnitude using percents, fractions, diagrams, decimals and numbers of exponents. - Add, subtract, multiply, and divide real numbers including integral exponents. - Uses estimation strategies in problem situations to predict results and to check the reasonableness of results.
Applying	- Identify equivalent representations of numbers using fractions, decimals, diagrams and percents. - Apply the concept of place value, magnitude, and relative magnitude using percents, fractions, diagrams and decimals. - Add and subtract real numbers with or without a calculator. - Uses estimation strategies in problem situations to predict results.
Developing	- Identify equivalent representations of numbers using decimals, diagrams and percents. - Apply the concept of place value, magnitude, and relative magnitude using percents, diagrams and decimals. - Subtracts real numbers - Rounds to appropriate decimal place value.

Introducing	• Identify equivalent representations of numbers using decimals and diagrams.
	• Apply the concept of place value, magnitude, and relative magnitude using diagrams and decimals.
	• Adds real numbers.
	• Rounds to nearest whole number.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
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2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.

STATISTICS AND PROBABILITY

Goal 5: Students will apply statistical methods to analyze data and explore probability for making decisions and predictions.

Indicator 1: Use statistical models to gather, analyze, and display data to draw conclusions.

General Education Standards	Alternate Content Standards
9-12.S.1.1. Draw conclusions from a set of data.	9-12.A.S.1.1. Gather and organize data.
9-12.S.1.2. Compare multiple one-variable data sets, using range, interquartile range, mean, mode, and median.	9-12.A.S.1.2 Compare multiple one-variable data sets using range, mean, mode, and median.
9-12.S.1.3. Represent a set of data in a variety of graphical forms and draw conclusions.	9-12.A.S.1.3 Interprets data in a variety of graphical forms and draw conclusions.

Indicator 2: Apply the concepts of probability to predict events/outcomes and solve problems.

General Education Standards	Alternate Content Standards
9-12.S.2.1. Distinguish between experimental and theoretical probability.	9-12.A.S.2.1. Distinguish between experimental and theoretical probability.
9-12.S.2.2. Predict outcomes of simple events using given theoretical probabilities.	9-12.A.S.2.2 Omit

South Dakota HS Statistics and Probability Alternate Achievement Descriptors

Levels	Descriptors
Advancing	• Gather, organize and draw conclusions from data. • Compare multiple one-variable data sets using interquartile range, mean, mode, and median. • Creates a graph using different graphical forms. • Predicts and compare outcomes based on theoretical and experimental probability.
Applying	• Gather and organize data. • Compare multiple one-variable data sets, using range, mean, mode, and median. • Interpret data in a variety of graphical forms and draw conclusions. • Distinguish between experimental and theoretical probability.
Developing	• Organizes given data in a logical manner. • Compare multiple one-variable data sets using range, mode, and medians of an odd numbered set. • Read data in a variety of graphical forms • Records accurate information from possible outcomes.
Introducing	• Sorts relevant from irrelevant information from a given scenario. • Compare multiple one-variable data sets using range and mode. • Identifies the different types of graphs (bar, line, pie, and pictograph). • Explores what events are predictable.

Continuum of frequency, setting, and support.	
4	Students demonstrate knowledge and skills consistently across multiple settings without support.
3	Students demonstrate knowledge and skills more than once in more than one setting without support.
2	Students demonstrate knowledge and skills once in one setting with minimal support.
1	Students attempt to demonstrate knowledge and skills once in one setting with support.